

NUCLEAR DIVISION NEWS

UNION
CARBIDE

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 2 — No. 17

Thursday, September 23, 1971



MAP DRIVE PLANTS—Harry E. Seagren, Marion Randolph and Harold Osborne map Oak Ridge plans for Nuclear Division's United Fund drive to be launched in early October. Seagren is heading the drive for the three plants in Oak Ridge, with Randolph as assistant, and Osborne as drive chairman for the General Staff. Paducah Plant employees are in the middle of their drive this week.

Cascade Improving Contract Let for ORGDP Construction

The Atomic Energy Commission has awarded a \$3.8 million contract to Rentenbach Engineering Company of Knoxville, Tennessee, for construction of a building addition at the Oak Ridge Gaseous Diffusion Plant.

The contract was awarded on the basis of competitive bids submitted by more than a dozen companies and represents the first major step in a long-range plan known as the Cascade Improvement Program for upgrading existing gaseous diffusion equipment and facilities.

Under the terms of the contract, Rentenbach will construct an addition to a building which is currently used for the manufacture of barrier, a porous material vital to the uranium enrichment process. Construction of the new addition, which will contain some 197,000 square feet of floor space, has begun and will be completed by about February, 1973.

The addition is designed to increase the production capacity in anticipation of planned equipment modifications at all three plants which will make use of greater quantities of improved barrier.

Two Phase-Job

The Cascade Improvement Program will be accomplished in two separate phases, one providing the enlarged support facilities and the second involving the modification of gaseous diffusion equipment to incorporate improved technology.

To date, the Congress has made available \$21.1 million to allow the AEC to proceed with the initial steps of the program, which

is designed to permit more efficient production of greater quantities of enriched uranium to meet anticipated future requirements of the nuclear power industry.

Process Explained

Gaseous diffusion is the method whereby the fissionable uranium-235 isotope, which comprises less than one percent of uranium as it occurs in nature, is separated from the more abundant uranium-238, resulting in uranium which is enriched in U-235.

The separation of these isotopes is accomplished by passing uranium in a gaseous state, known as uranium hexafluoride, through a porous barrier. The lighter uranium-235 isotopes strike against the barrier more frequently and as a result pass through the barrier in greater numbers. This step is repeated hundreds of times in a cascade arrangement until the desired percentage of uranium-235 has been obtained.

Noted Nuclear Scientist Health Physics Speaker

Samuel Glasstone, renowned atomic scientist and author, will speak at the September meeting of the East Tennessee Chapter of the Health Physics Society. The meeting is set at the Oak Ridge Country Club, beginning with a social hour at 5:30 p.m., Sept. 30.



Glasstone, the author of "Sourcebook on Atomic Energy," has been a consultant and contractor with the AEC almost continuously since 1948, including being a consultant to the directors office at Los Alamos Scientific Laboratory.

William G. Pollard, executive director of Oak Ridge Associated Universities, will moderate Thursday's meeting.

Reservations may be made through James D. Berger, at ORAU, telephone 483-8411, extension 333.

Toxicology Information Center Is Now Established at Biology Division Here

A toxicology Information Response Center (TIRC) has been created to store and disseminate information concerning the nature and effects of toxic materials. The Center, an arm of the Toxicology Information Program (TIP) of the National Library of Medicine, has been established in ORNL's Biology Division at the Y-12 Plant.

The initial emphasis of the

Center, chartered by TIP and under the direction of ORNL Biochemist, Dr. David G. Doherty, is to respond to questions on the toxicology of pesticides and other chemicals potentially hazardous to the environment. This topic was selected because of national concern with the effects of these agents on man and the ecological systems which support human

(Continued on Page 8)

United Fund Leader Asks 'Am I My Brother's Keeper?'

October 6 — That's the day the United Way Appeal begins among Nuclear Division employees in Oak Ridge. On that day solicitors will start distributing literature for area drives, payroll deduction cards, and needed share pins. Also they will be inviting you to view "A Time for Us," a slide presentation of the work of the United Fund, prepared by Bob Wesley of Y-12's Technical Information staff.

Leaders for the Nuclear Division Drive are General Chairman, Harry E. Seagren, director of ORNL's Plant and Equipment Division; Assistant General Chairman, Marion Randolph, a development engineer with the Gaseous Diffusion Development at ORGDP; and General Treasurer, James A. Corn, an accountant in the Nuclear Division Finance and Budget Office.

Of the United Way Appeal Seagren made this statement: "For thousands of years mankind has pondered Cain's question concerning Abel, 'Am I my brother's keeper?' Later another man was asked the question, 'Who is my neighbor?' There are many men, women and children in need of help. Churches and government cannot do it all. The United Way presents an opportunity for us who have jobs, wages and salaries. Are 'U' in the 'United' effort to help others?"

The unofficial goal for the Oak Ridge Nuclear Division employees drive is \$325,000. The goal will be determined by a payroll updating which was not completed until after ND News press time. It will be announced on signs and posters as the campaign begins in early October.

Paducah UF Drive

Nuclear Division employees in the Paducah Plant are "jumping the gun" with their United Way drive . . . exerting all-out efforts to finish this week. Gus Legeay is heading the drive in the Paducah Plant. Deductions there may be made to UF agencies for Paducah-McCracken County, Mayfield-Graves County, Ballard County and Massac (Illinois) County.

Toll Enrichment Is An All-Time Record

An all-time record in toll enrichment sales was set in August at the Oak Ridge Gaseous Diffusion Plant. During the month, approximately 697,576 pounds of enriched uranium — valued at more than \$38 million — was shipped to customers in the United States and four foreign countries for use in nuclear reactors for the generation of electricity.

The previous monthly high in toll enrichment sales was set in February, 1971, when charges totaled \$28 million.

States served during the month included Florida, Illinois, Maryland, Michigan, New Jersey, New York, and South Carolina. Foreign customers were located in Japan, The Netherlands, Spain and West Germany.

Toll enrichment was instituted on January 1, 1969. Under this program, privately-licensed owners bring their uranium to a gaseous diffusion plant for enriching on a toll basis. Customers are charged for the services required to separate from natural uranium the desired percentage of uranium-235 isotope, usually between two and three percent.

During 1969, the value of toll enriching services was \$45 million. In 1970, the figure grew to \$90 million. For the first eight months of 1971, toll enriching sales totaled more than \$131 million.

Secretaries To Sponsor Fashion Show Oct. 12

The Oak Ridge Chapter of The National Secretaries Association will sponsor a fashion show and card party at the Oak Ridge Country Club on Tuesday, October 12, 8 p.m. The theme for the show will be "Fashion E.S.P. — Excitement, Sensitivity, Power." Fashions will be by Miller's of Knoxville and Oak Ridge with commentary by Barbara Willard, Miller's Fashion Director.

Tickets are available from Oak Ridge Chapter members and donations will be used for educational activities. Sallie Jansch, CPS, Y-12 Plant, is chairman of the event.

Payroll Deduction Provides Simple, Effortless Method for Serving Others

Extend your hand with a contribution the United Way. Benefits reach those in need and rebound to you either through direct help to you or your family, or through the satisfaction you receive in helping a handicapped child, an unloved child, a serviceman with a problem, or a person who has lost his way in life.

By participation in the United Way, you may extend your dollars to thousands. You and your family as well as your neighbors may need these services.

The United Way is not a dollars drive. True, dollars are needed to maintain rescue squad equipment, to equip a Boy's Club softball diamond, or to pay the salary of a therapist or psychiatrist. The United Way collects dollars to distribute to county and area agencies and each dollar you contribute helps. But your interest is also important — your interest in saying a good word for the work done through member organizations, your interest in volunteering to work in an agency of your choice, your thoughtfulness in contributing food, clothing, linens and furniture which you may not need to an agency which depends on receiving these items.

Share Because You Care

Don't make a contribution merely because "it's expected of me." Share because you care. Give generously of yourself and your resources.

When the United Way Drive begins in early October among several thousand Nuclear Division employees, remember these facts as you choose your gift.

Contributions to five county drives — Anderson, Knox, Roane, Loudon and Morgan — may be made by payroll deduction. Or you may contribute to any other United Way drive by a cash donation.

Paducah Plant employees may give through agencies in Paducah — McCracken County, Mayfield-Graves County, Ballard County and Massac County (Illinois). Cash contributions may also be made to other agencies in the Western Kentucky area.

The United Fund in Knox County serves 32 agencies. They are striving to reach a goal of \$1,420,000 and will kick off their campaign in late September. The Anderson County United Fund, with a 1971 goal of \$317,650, serves 20 agencies.

Roane County's goal of \$62,312 serves 13 county and area agencies. Loudon County United Fund serves 14 agencies and has a 1971 goal of \$46,145. Morgan County



SPEECH THERAPIST—A youngster is encouraged past a handicap by a speech therapist. His parents thought he was retarded, when in truth, the child was hard-of-hearing. Centers through our area are busy training the handicapped child and adult alike.



HELP WHEN NEEDED—Rescue Squads of the area give vital assistance in time of distress. Here volunteer workers attempt to revive a young boy on a nearby lakeside. Volunteer squad workers serve long hours without any pay whatsoever.

contributes to eleven agencies and has a goal of \$6,200. Their drive begins on October 2.

Employees To Be Contacted

Beginning October 6 campaign solicitors will contact each employee with county literature, slide shows and films to acquaint you with the service of the United Fund, and your payroll deduction card. The card permits payroll deduction to one of five counties or cash contributions to any other United Fund drive or agency. Also a dollar amount or a needed share may be selected. A needed share is three-tenths of one percent of base pay or more. This amount equals 30 cents of every \$100 earned.

Agencies Which Work Through You

Anderson County

Anderson County Association for Retarded Children
Anderson County Emergency and Rescue Squad
Anderson County Arthritis Foundation
Boys' Club
Boy Scouts
Camp Fire Girls
Children's Welfare and Distressed Families Committee
Daniel Arthur Rehabilitation Center
Emory Valley School and Sheltered Workshop
Girl Scouts
Holiday Bureau
Mental Health Center
Planned Parenthood Association



CARE OF THE AGED—United Fund agencies do not overlook any part of our culture. Here a volunteer worker assists an older citizen measure out his daily medication.

Scarboro Day Care Center
United Services Organization
Young Men's Christian Association (YMCA)
Young Women's Christian Association (YWCA)
Youth Haven
Multi-Services
Florence Crittenton Agency
Red Cross, Oak Ridge and Clinton Chapters

Knox County

American Red Cross
American Social Health Association
Arthritis Foundation
Boy Scouts
Boys' Club of Knoxville
Boys' Club of Vestal
Child and Family Services
Dale Avenue Settlement House
Daniel Arthur Rehabilitation Center
East Tennessee Children's Rehabilitation Center
Florence Crittenton Agency
Girls' Club of Knoxville
Girls' Club of Vestal
Knox Area Mental Health Association
Knox County Association for Retarded Children

Today, more than ever
we need each other
Share because
you care

Knoxville Area Urban League
Knoxville Nursery Schools
Helen Ross McNabb Mental Health Center
National Assembly for Social Policy and Development
National Council on Crime and Delinquency
National Recreation and Park Association
Planned Parenthood Association
Poison Control Center
Salvation Army
Tanasi Girl Scouts
Travelers Aid Society
United Cerebral Palsy Association
United Community Services
U.S.O.
Volunteers of America
Y.M.C.A.
Y.W.C.A.

Roane County

American Red Cross
Arthritis Clinic for Anderson and Roane Counties
Boy Scouts
Daniel Arthur Rehabilitation Center
Girl Scouts
Muscular Dystrophy Association of America
Planned Parenthood Association
Regional Mental Health Center
Roane County Educational Emergency Assistance Association
Roane County Rescue Squad
Roane County 4-H Volunteer Leaders Organization
Travelers Aid Association of America
United Services Organization

Loudon County

Daniel Arthur Rehabilitation Center
Boy Scouts
Girl Scouts
Loudon County Rescue Squad
Red Cross
Middle Tennessee Chapter of the Arthritis Foundation
Boys' Club
American Legion Mile of Dimes
Empty Stocking of Greenback
Loudon Mile of Dimes
Philadelphia Community Chest
USO
Youth Club of Loudon
Loudon County Advisory Committee for Department of Public Welfare

Morgan County

Morgan County Emergency Rescue Squad
Boy Scouts
Girl Scouts
Morgan County 4-H Leaders Organization
Daniel Arthur Rehabilitation Center
American Red Cross
Medical Aid
Cancer Fund
T. B. Medical Aid
Volunteer Fire Department
Emory Valley Mental Rehabilitation Center



BOYS' CLUB—Doing service among the community's young is the Boys' Club, one of the agencies of the United Fund. Thousands of boys in the East Tennessee and Western Kentucky areas are served by Boys' Clubs.



PEOPLE HELPING PEOPLE—A group of Carbiders recently toured one of the participating agencies in the United Appeal and watched as the volunteers sorted clothing needed by emergency agencies. This week has been declared United Appeal Week and volunteers from all over the plant will be contacting co-workers in the Count, Compare and Share your Blessings drive.

Count, Compare, Share Your Blessings

The theme of United Appeal, 1971, at the Paducah Plant is "COUNT, COMPARE, AND SHARE YOUR BLESSINGS." These words probably express in the best possible way what Paducah employees have been doing all these years that they have taken part in the United Program for community help.

The campaign began in the early spring when Chairman Gus Legeay asked for volunteers from each division to meet and organize a program to publicize activities, and then seek contributions for the many agencies of the UA.

September 20 through 24 has been declared United Appeal Week. A representative from each division has visited one of the participating agencies, bringing back to fellow employees first-hand information on the good accomplished by each agency.

This week these representatives will be calling on co-workers to share their blessings with those less fortunate.

The division solicitors are:

Finance and Materials: Gladys Adams, Melvin Ballard, Elaine Bradley, E. Byers, Barry Chapman, Tom Grooms, G. N. Henry, C. F. Johnston, Ophelia Oliver, Velda Robertson and Ted Cole, alternate.

Laboratory: Alice Lemonds, Ken Carpenter, Mary Parrish, Toni Piercy and Howard Pulley.

Industrial Relations: Hester Albritton, Carol Ballard, Coy Easley, John Hankins, David Stahr, Tom Wright and Gus Yarbrough.

Engineering: W. D. Brice, P. G. Edwards, W. J. McGee, M. E. Mechlin, D. S. Muir and R. R. Veasey.

Operations: P. E. Anderson, B. E. Armbruster, C. L. Ashburn, F. M. Blaine, B. J. Bond, R. P. Boudreaux, R. E. Brust, R. L. Burgess, D. L. Castro, J. H. Chestnut, J. J. Coil, E. L. Craycraft, C. Fowler, H. B. Goode, J. F.

Goodman, W. D. Greer, J. R. Houston, J. A. Howell, B. T. Kraemer, J. C. Locke, D. E. Lowe, W. F. Longton, W. T. McCaig, M. McDougal, J. R. Morton, H. M. Moss, M. E. Rollins, P. Rowland, F. P. Smith, E. F. Speer, J. D. Tate, D. L. Trentham, E. A. Waggoner, C. W. Walter, R. C. Ward, J. C. Watkins and H. A. Wetton.

Maintenance: W. H. Albritton, H. E. Anderson, E. W. Anderson, J. D. Armstrong, F. D. Baker, C. A. Barkley, J. E. Bell, C. Big-

gart, D. H. Box, J. W. Bridges, J. M. Compton, F. R. Duley, V. B. Finley, W. B. Ford, H. L. Gison, R. A. Goode, C. M. Hall, L. R. Hall, C. E. Harris, M. H. Hunt, H. P. Jackson, J. T. Jones, T. W. Lowery, C. A. McDaniels, C. Notgrass, J. E. Orazine, P. E. Park, G. Perdue, A. A. Plewke, C. Sears, J. B. Smith, J. Stearns, E. Steinbeck, W. A. Sullivan, A. G. Terry, B. R. West, S. T. Williams, W. Wilson, J. D. Teasley and D. B. Word.

Fire Prevention Week - October 3-9

The Paducah Plant Fire Prevention and Clean-Up Committee is making plans for the plant's participation in fire prevention week October 3-9.

A. A. Toney, Finance and Materials, is chairman of this year's committee. Other members of the committee are E. E. Brown, C. L. Bratcher, B. E. McDougal, Alice Lemonds, C. S. Maxwell and J. W. Grisham.

"Fire Hurts" was adopted as the theme of the week's activities. Emergency evacuation drills will be conducted by the shift superintendents office, a plant-wide inspection to detect conditions creating fire hazards will be held; and a film emphasizing hidden hazards in the home will be shown. In addition, posters depicting the slogan will be shown at work and literature will be mailed to the employee's home.

Fire has no respect for time and place. Neither does it give forewarning. The national trend of a decreasing role in accidental deaths due to fires and burns can only be further reduced by continuing emphasis on fire control measures.

Although fire cost more than \$2.65 billion in losses last year, its most terrible cost is counted, not in dollars, but in human misery.

Fire claimed 12,200 lives in this country last year. Of these, about one-fourth were children. Many hundreds of fire victims are still recovering from serious, often disfiguring, injuries.

Countless thousands of Americans had payless paydays when fire interrupted their jobs, and other thousands saw jobs permanently gone when fire wiped out their employers' business. Still others will never recover full

from the financial disaster of a home or business fire.

These are heavy costs to pay for an act of negligence or ignorance. Through knowledge and care, destructive fires can be virtually eliminated.

Fire Prevention Week - October 3-9 - offers a special opportunity to bring much-needed information on fire hazards and corrective action to the people in our community.

Remember - DON'T GIVE FIRE A PLACE TO START!

Paducah Gaseous Diffusion Plant

Paducah Editor Keith Bryant
extension 369

Sun-Democrat Praises Levin For Planning Commission Aid

Robert W. Levin, Laboratory Division Superintendent at the Paducah Plant, recently announced his plans not to seek reappointment to the Paducah Planning Commission.

Levin, who came with Union Carbide in early 1944, transferred to Paducah in 1951. He is a graduate of Harvard University, and is an avid photography bug. He also builds and operates his own amateur radio transmitters. He and Mrs. Levin live at 3937 Pines Road, Paducah. They have one married daughter.

The Paducah Sun-Democrat editorialized on Levin's service on the Commission. The editorial is reprinted with the permission of the Sun-Democrat.

BOB LEVIN GAVE GOOD SERVICE

"Nowadays when a man comes along who remains calm in the face of stormy situations, we of the press are likely to say he is 'unflappable.'"

"The word fits no one better than Robert Levin, who announced that he will not seek reappointment to the Paducah Planning Commission. He served for six years on the commission, five of them as chairman, and in all that time reporters who covered its meetings could not recall a time when Mr. Levin even raised his voice, let alone lost his composure.

"That quality of imperturbability served him and the commission well in a position where emotions sometimes run high and issues cut deep. Mr. Levin always had well-thought-out reasons for the positions he took, and even those who were disappointed by them never could reasonably charge him with bias or failure to give earnest consideration to all sides.

"His coolness under stress also served to keep the commission itself focused on the basic questions



Robert W. Levin

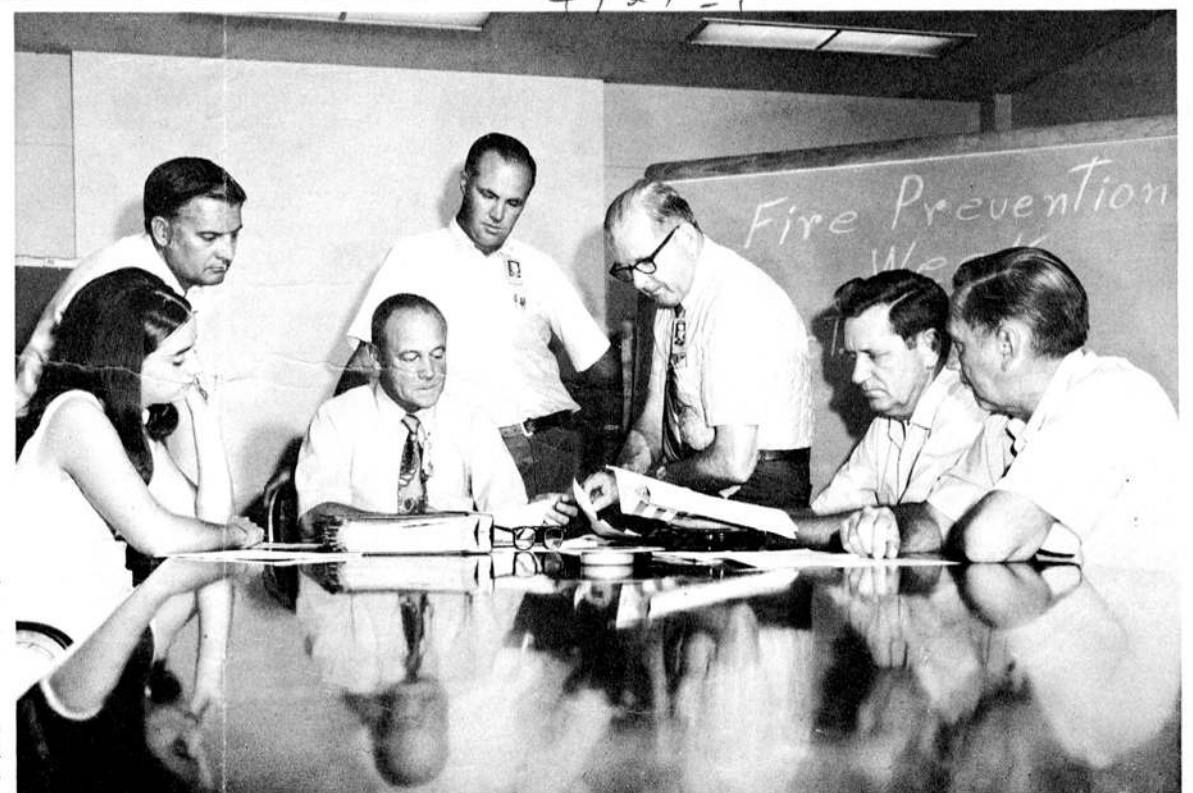
instead of drifting into non-essentials. It was Mr. Levin's quiet persistence that succeeded in drawing up the city's overhauled zoning ordinance, a task that took four years.

"We sometimes tend to overlook the Robert Levins of our community, who serve in demanding positions for no compensation except the satisfaction of serving.

"Mr. Levin, who is laboratory superintendent at Union Carbide, has earned a rest from his volunteer labors, and the gratitude of Paducah. He took on a hard job and performed it well. We thank him for it."

GOVERNMENT AT WORK

Ten Federal agencies deal in manpower programs, 18 in improving our natural environment, 20 in health, and 21 in spending for higher education, according to the findings of the Senate Government Operations Committee. There are 1,050 separate programs that provide money to states, cities, institutions or individuals.



FIRE PREVENTION COMMITTEE—A. A. Toney, Finance and Materials, in the center, maps plans for observation of Fire Prevention Week in the Paducah Plant October 3-9.

Oak Ridge Gaseous Diffusion Plant

ORGDP News Coordinator D. R. Carter
Extension 3-3017

Monday Set as Deadline for Purchasing K-25's Barbecue-Hootenanny Tickets

Monday, September 27, is the final day for the sale of tickets out in the Plant for the annual K-25 Barbecue-Hootenanny to be held at the Clark Center Park on Saturday, October 2.

K-25 employees planning to attend are reminded that there is generally a shortage of tables and seats. A number of employees bring their own portable picnic tables and chairs.

Several softball games are being planned between divisional teams for the afternoon before the food serving starts at 5:00 p.m.

Co-Op Essay Nets Trip To Colorado for Watts

James E. Watts, Jr., son of J. E. Watts, Cascade Maintenance, recently returned from the annual convention of the American Institute of Co-Operatives held on the campus of the Colorado State University in Fort Collins, Colo.

Young Watts won the trip as the first prize in an essay contest sponsored by Roane Farmer's Co-Op. His essay was entitled, "Why Farmers Co-Op."

ORGDP's Barbecue Picnic Will Require Entire Park

The entire number one picnic area and adjoining parking lot, including the boat trailer parking lot at Clark Center Park, is reserved Saturday, October 2. The annual K-25 Barbecue-Hootenanny is being held then. Boats and trailers must be removed from the parking and launching area by noon, October 2.



James E. Watts, Jr.

25 Year Veterans August

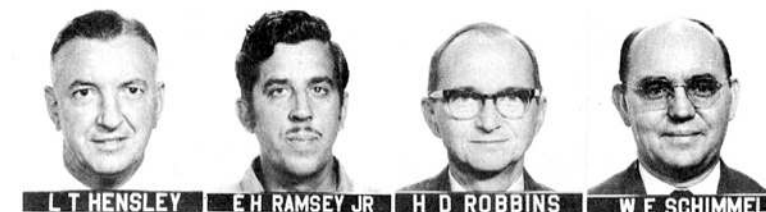


T. C. ARCHER J. R. BRANDON R. E. BROCKWELL JR. C. H. GOLEY

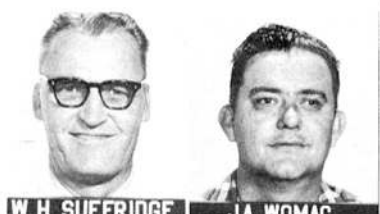


V. W. JONES T. B. KEYLON A. G. WILDE O. B. YOUNG

September



L. T. HENSLEY E. H. RAMSEY JR. H. D. ROBBINS W. E. SCHIMMEL



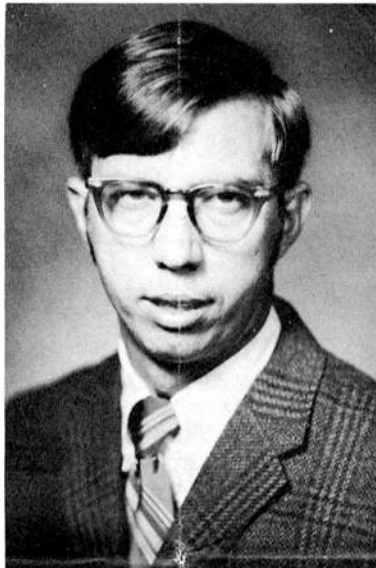
W. H. SUFFRIDGE J. A. WOMAC

SAFETY SCOREBOARD

ORGDP
Has Operated
1,831,000 Safe Hours
Through September 16
Since last disabling injury on May 4



ORGDP FUND LEADERS—Seated, left to right, are ORGDP's United Fund principals . . . M. B. Tate, T. L. McCreary, J. W. Arendt, General Chairman; Joe Acres, secretary; W. E. Muldrew and C. W. Castle. Standing are D. L. Stansberry, H. C. Jones, F. H. Anderson, L. B. True, treasurer; R. B. Schappel, J. W. McKeever, K. E. Habiger and W. H. Byrd. Lee Porter and R. M. Gamble, auditor, were not present for the picture.



Ralph L. McMillan

R. L. McMillan Named Laboratory Technician

Ralph L. McMillan was recently promoted to a laboratory technician in the Mechanical Development Department of the Separation Systems Division. He came here earlier this year, from Robertshaw Industrial Controls, Fulton-Sylphon, Knoxville.

McMillan was born in Athens, Tenn., and grew up in Oak Ridge. He has a BS degree in industrial technology from Tennessee Technological University. Married to the former Betty L. Mattox, of Oliver Springs, he lives at 236 Robertsville Road, Oak Ridge. The couple has a twin son and daughter, Michael and Michelle.

Outside interests include scuba diving, hunting and fishing.

20 Years' Service

AUGUST

W. M. Henley
H. H. Lett
C. E. Robinson
V. L. Roisum
R. L. Smith
B. E. Srite
J. F. Warner
J. E. White

SEPTEMBER

D. L. Burkett
K. S. Evans
R. B. Farrar
D. Gray
C. E. Hair
W. D. Hedge
E. J. Hicks
J. A. Matson
R. M. Rigdon
E. H. Shaw
J. W. Sumpter

John Arendt Will Spearhead United Fund Drive at ORGDP

John W. Arendt, superintendent of Physical Measurements, Inspection and Nuclear Technology in the Laboratory Division, will spearhead the United Fund Drive in the Oak Ridge Gaseous Diffusion Plant.

A native of Freedonia, Wisc., Arendt joined the Manhattan Project at the University of Chicago shortly after his graduation from Marquette University. He came with Union Carbide in June of 1945 as a supervisor in the gaseous diffusion plant, while it was still under construction.

No stranger to civic responsibilities, Arendt has been very active in civic and public service institutions. He is active in the American Cancer Society and serves on the state board of directors.

Mrs. Arendt is the former Nell Beatty. They live at 109 Caldwell Drive, in the Emory Valley section of Oak Ridge. Their son Philip attends Oak Ridge High School and son Steven attends The University of Tennessee.

"I am sure that K-25ers will



John W. Arendt

respond again this year to the United Fund drive," Arendt said last week, "What other method could we give money that would be spent on so many needed projects?"

Finance and Materials Division Passes Goal in Cost Reduction by Big Margin

The August meeting for the ORGDP Fabrication and Maintenance Cost Reduction Program revealed that 73% (\$310,000 toward a total goal for 1971 of \$426,000) had already been attained. Hourly personnel participation has tripled as compared to 1970.

The speaker for the August session was W. J. Weeks, electrical supervisor.

Participants in the cost reduction accomplishments in the August report were:

C. T. Angel, C. R. Barlow, R. Beck, L. H. Bell, E. S. Bishop, C. T. Bolen, C. W. Butterini, F. W. Calhoun, B. P. Campbell, M. F. Chandler, J. R. Collins, G. S. Dalton, O. H. Dillon, T. G. Dry.

E. E. Elmore, S. F. Finch, M. J. Grady, A. F. Griffin, C. L. Gritzer, H. E. Hallvas, P. D. Harris, W. A. Haynes, B. E. Heidle, T. B. Keylon, F. C. Kirkland, J. M. Kirkpatrick, D. L. Littleton, R. W. Lynn,

W. A. Martin, D. J. McCarty, M. B. McCloud, C. E. Mitchell, V. T. Murphy, J. C. Murray, R. L. Pardue, J. R. Quarles, G. J. Ramey, W. J. Robertson, W. E. Rooks, A. H. Rucker.

C. E. Sellers, R. M. Sheets, R. G. Shupe, L. Smith, C. R. Tedder, D. W. Thomas, B. M. Timmerman, W. T. Waldroup, C. A. Watson, W. J. Weeks, E. West, J. T. White, H. E. Williams.

C. E. Mathews, Operations Division and L. A. Smith, Separation Systems Division also participated in this meeting.

Carter Will Coordinate News; Mayberry Retires

Douglas R. Carter will assume the duties of ORGDP news coordinator for the Nuclear Division News when Harold Mayberry retires the end of this month. Carter will work with James A. Young, editor, who will spend a portion of his time at ORGDP.

Possible news items may be referred to Carter, telephone 3-3017, or directly to Young, telephone 3-7100. Items sent through the mail for the attention of Carter or Young should be directed to stop 124, K-1001.

ORGDP employees buy giving the United Way!



It's the UNITED WAY

ORNL CAMPAIGN LEADERS huddle over final plans for the October drive among employees. Meet this year's leaders (l-r) Bob Keil, a machinist in Plant and Equipment Division who directs the ORNL drive for the Atomic Trades and Labor Council, Fred Maienschein, director of Neutron Physics Division, who is co-chairman of the ORNL drive with Norman Beeler, vice president of the Atomic Trades and Labor Council and a pipefitter in Plant and Equipment Division, Clyde Scott, a guard in Laboratory Protection Division, who directs the ORNL drive for the International Guard Union of America, and Claude Long, Budget and Programming Division, who is serving as ORNL treasurer. See page one story for drive information.

RECON System Giving Vital Data to Visitors at Geneva

During the Geneva Conference on Peaceful Uses of Atomic Energy several members of the Oak Ridge National Laboratory Mathematics Division have been going to work Swiss time and going home Oak Ridge time. They are the personnel operating the RECON Information Retrieval System which enables visitors to the AEC exhibit at the Geneva Conference to search the Nuclear Science Abstracts computerized files on a real time basis.

The RECON system, originally programmed by Lockheed Corporation for NASA, has been operated at ORNL for the AEC Division of Technical Information serving six terminals in California, Pennsylvania, Washington, D.C. and Oak Ridge. The Geneva terminal is a keyboard and television screen on which users can display how many literature references were written by a specific author or by "keywords" which describe the subject matter. After the user has typed in his query it will take from 1 to 5 seconds for the computer to display a reply on the TV screen. Having chosen several sets of references, the user can call for the display of logical combinations of these sets to determine from the title, author and keyboard lists if he has further interest. These displays can also be printed at the computer on request.

The computer program can be operated from either large IBM 360 computer at ORNL and stores about 200 million characters of information. At the same time these computers process several other jobs including remote batch work from Y-12, ORNL, and Washington, D. C. as well as the many local jobs. The long distance transmission is over the Autovan phone lines using a dial-up phone having a priority just

below that of "presidential priority." The system is operated on request from 5 a.m. to 2 p.m. EDT. In addition to RECON, power reactor economics code, GACOST, originally written by Gulf General Atomics was converted to a remote terminal program at ORNL. It permits the user in Geneva to perform reactor calculations on the Oak Ridge computer and display the results at the exhibit.

Problem?—Busy Signals

The preparation and operation of the system have involved twenty-two persons from the ORNL Mathematics Division and IBM. Along with working on problems here at home the staff has had to locate faulty phone equipment in Europe at 5 a.m. using the computer to test the lines. The staff cannot see the display but only the pulses of information on an oscilloscope as it goes out and comes in. They report that as long as all goes well its really sort of routine once you know you can really do it. But things get lively and interesting when a complicated setup like this starts to go wrong. So far less than one hour has been lost to operational difficulties at ORNL. Most of this was due to both computers coming to a screeching halt one after the other. Would you believe that busy signals constitute the most frustrating problems?

The audience reception at Geneva is reported to be excellent and the workers are pleased by the report that the official UN delegation overstayed their schedule and some even stayed to see all of the show.

The personnel involved at ORNL were: Ray Plemens, Sherill Smith, R. Finch, Larry Finch, D. Plaster, H. Norman, Larry Hodge, A. Baker, C. E. Hammons,

Company Service

ORNL employees reaching 20, 25, and 30 years of company service in September are:

30 YEARS

Sebastian B. Lupica.

25 YEARS

Richard P. Jernigan Jr., Leroy White, Helen W. Keener, Edwin A. Reed, Wilfred M. Good, Harold E. Goeller, Sam S. Croft, John C. Hawley, Thurman H. Viles, Daniel N. Hess, James Capshaw, James A. Young, Alfred C. Butler, Harry R. Bronstein, Robert K. Francis, James L. Hunt, John H. Gillette, Oliver C. Yonts.

20 YEARS

Charles F. Baes, Eldon D. Arnold, James T. Roberts Jr., Bill C. Williams, Georgia Westmoreland, Bernard Lieberman, Billie S. Dunlap, William H. Hinds, John P. Judish, Wayne L. Maddox, Cleveland T. Johnson, Donald J. Fisher, William S. McBee Jr., Claude E. Collins, John M. Chandler, Herman W. Jinks, Clayton O. McNew Jr.

CU Dividend

The ORNL Credit Union announces a 6 percent dividend to be paid to members' shares account for the quarter ending September 30.

This is the second consecutive quarter in 1971 that the Credit Union has paid a six percent dividend which is the maximum amount within the National Credit Union Administration law. Interest is compounded quarterly.

Robert Rannie, R. Williams, C. Walker, D. McDowell, Woody Gove, Arlene Culkowski, F. Hammerling, Bob Stephenson, R. Durfee, Al Brooks, F. Myers, A. Byrd and R. King.

Oak Ridge National Laboratory

ORNL Editor Martha Goolsby
extension 3-6421

Research Materials Meeting Is Set in Gatlinburg, October 5-8

The Third International Symposium of Research Materials for Nuclear Measurements will meet October 5-8 at the Riverside Motor Lodge in Gatlinburg. Oak Ridge National Laboratory is sponsoring the meet.

Approximately 200 representatives from the nuclear industry and nuclear research groups will be in attendance. Also a number of representatives from several foreign countries including Canada, Belgium, Germany, Hungary, France, United Kingdom, Brazil and Japan will attend. Almost half of the papers will be presented by these representatives.

Eight papers will report ORNL research. These papers are "The Use of an Isotope Separator in Preparation of Special Research Samples" by Gerald Alton and L. O. Love; "Preparation of Self-Supporting, Metallic Foils of Isotopic Chromium" by P. Kuehn, F. R. O'Donnell and E. H. Kobisk; "Preparation of Reactor Neutron Dosimeters" by W. D. Box; "Tritium-Containing Targets for High-Yield Neutron Generators" by F. R. O'Donnell and H. L. Adair; "Production and Crystal Growth of Isotopic Rare-Earth Metals" by R. E. Reed and W. B. Grisham; "The Preparation and Characterization of Single Crystal Silver Films" by T. S. Noggle; "A Study of Various Parting Agents for Producing Self-Supporting Thin

Films" by D. N. Braski; and "Target Thickness and Uniformity Measurements Using Charged Particles" by H. L. Adair.

Other topics of interest are special techniques in target preparation, simple techniques of producing thin carbon films and problems of nuclear measurements.

Ed Kobisk, Isotopes Division, is a co-chairman for the meeting.

WANTED

Rides
Car Pools



CAR POOL MEMBER from vicinity of Waddell, West Outer or Pennsylvania to East or North Portal, 8:15 a.m. Tom Burnett, 3-6939 or 483-1975.

RIDE OR JOIN CAR POOL from Halls to any Portal, 8 a.m. E. W. Pritchard, 3-6523.

RIDE from Alcoa to East Portal, 8 a.m. Carolyn Lewis, 3-1493 or 984-4288.

CAR POOL MEMBER from UT area to South Portal, 8:15 a.m. Dick Snyder, 3-1922 or 522-0940.

RIDE wanted from Jefferson Avenue, Oak Ridge, to East, North or South Portal, 8 a.m. Brenda Jeffers, 3-6811 or 483-9594.

RIDERS wanted from Powell area, 7000 area, East or North Portal, 8 to 4:30. S. A. Medley, 3-6430 or 947-7001.



PERSONNEL DIVISION'S DEBI SWINDLE reminds us that October 3-9 is National Fire Prevention Week. The poster indicates the 100th Anniversary of the Chicago Fire. During the week employees are encouraged to participate in a special "Debris Pickup" which will be coordinated by division safety officers. Also special training sessions at the fire training site. Arrangements for this training may be made by phoning C. R. Clough at 3-1158.

Oak Ridge Y-12 Plant

Y-12 Plant Editor James A. Young
extension 3-7100



Keith G. Kahl

Keith Kahl Heads Y-12 Fund Drive

Heading Y-12's United Fund Drive this year is Keith G. Kahl, superintendent of the Fabrication Division.

Kahl, a 12-year veteran of Union Carbide, is a graduate of the U. S. Military Academy at West Point. He has also done graduate work at the University of Michigan and The University of Tennessee.

He and his wife and two children live at 109 Newton Lane, Oak Ridge.

Kahl served in the U. S. Army from 1953 to 1956.

"Y-12ers are always ready to do more than their share," he stated last week, "I'm sure that our drive will be a success again this year, and last year's record-giving amount will be surpassed easily."

Thompson Gives Welding Society Papers in Virginia

"Oak Ridge Y-12 Plant Fabrication Capabilities" was discussed by a Y-12 engineer at two American Welding Society meetings — one in Roanoke, Va., September 14, and the other in Richmond, September 15.



Thompson

J. C. Thompson, Jr., supervisor of Mechanical Inspection in the Technical Division, described the variety of manufacturing tools used at the plant and listed some of the unique fabrication tasks Y-12 has performed to support programs of the U. S. Atomic Energy Commission and other federal agencies.

Thompson lives at 801 Gate Lane, Knoxville.

WANTED Rides Car Pools

Two riders wanted from West Haven section, Knoxville, to West Portal, straight day. Ray Phillips, plant phone 3-5594, home phone Knoxville 524-5334.

Ride wanted from Alcoa vicinity to any portal, H Shift. Fred Love, plant phone 3-7855, home phone Alcoa 984-3256.

Riders wanted from Concord via Lovell Road, to West Portal, straight day. J. C. Taylor, plant phone 3-7510, home phone Concord 966-5163.

Ride wanted from Chilhowee Park area, also one wanted from Cecil Avenue, between Cherry and Broadway, to Central Portal, straight day. Florence C. Olden, plant phone 3-5367, home phone Knoxville 522-3322.

Ride wanted or will join car pool from Midway subdivision, Oliver Springs, to North Portal, straight day. W. R. Jago, plant phone 3-5935, home phone Oliver Springs 435-7187.

Will join car pool from 139 Johnson Road, Oak Ridge, to Central Portal, straight day. D. D. Blackburn, plant phone 3-5655, home phone Oak Ridge 483-6587.

Car pool members wanted from North Hills, Buffat Mill Road sections, Knoxville, to any portal, straight day. Bill Owens, plant phone 3-5986, home phone Knoxville 546-4149.

Ride wanted from 305 Elmwood Dr. (Smithwood area) Knoxville to Central Portal, straight day. Georgia Bower, plant phone 3-8203, home phone Knoxville 687-8014.

Arnold, Garrett, Hamm, Murphy, Upton Retiring

Five Y-12ers will retire next week with a total of 114 cumulative years of Union Carbide service.

Retiring are Taylor S. Arnold, Chemical Services; Harvey A. Garrett, Buildings, Grounds and Maintenance Services; Thomas C. Hamm, Dispatching; William J. Murphy, Beta Two Shop; and Edward C. Upton, Building Services.

Congratulations, and best wishes!



Don J. Bostock



Robert A. Tannert

Bostock and Tannert Served On the Governor's Cost Study

Two Nuclear Division men served on the Governor's Study on Cost Control, better known as the "Jarman Commission."

The 60-man commission, headed by retired industrialist W. Maxey Jarman, cited means by which the state government might save up to \$175 million over the next three years.

Don Jeffrey Bostock, superintendent of Special Production Scheduling and Coordinating; and Robert A. Tannert, superintendent of Data Systems Development, both in the Oak Ridge Y-12 Plant, served from March 1 until May 1 on the intensive study. The study was financed by more than \$100,000 contributed by Tennessee business and industry.

One of the peculiar aspects of the study was the veto power of each member. Unanimous agreement had to be reached before a recommendation could be included in the report.

Tannert pointed out that most of the educators on the study recommended a one state-university system, but others were opposed, hence the recommendation was not included.

Many of the sections are well done, points out a political analyst, with in-depth analyses of problems and suggested solutions . . . many of the solutions neither cost nor save, just change old-fashioned governmental methods of operation.

Among the many changes recommended was the reduction of the number of commissions and agencies reporting directly to the governor from 31 to seven. The seven would be "major areas of government endeavor," . . . finance, human resources, natural resources, public safety, agriculture and commerce, education, and transportation.

Bostock and Tannert did the exhaustive research work in Nashville.

Bostock, a native of Philadelphia, Pa., came to Oak Ridge on May 14, 1947. He holds a BS degree from Penn State University and an MS from The University of Tennessee. He and his wife, the former Dorothy Allison, have three children. They live at 924 West Outer Drive, Oak Ridge.

Tannert, a native of Houston, Tex., has a bachelor of music degree from Stephen F. Austin State University, and an MBA and ABD in management from Louisiana State University. He and Mrs. Tannert, the former Jo Ann Bonanno, have two children, and live at 109 Morgan Street, Oak Ridge.

Company Service

Congratulations to the following Y-12 veterans, observing important dates with Union Carbide Corporation.

20 YEARS

Ulyses Hatmaker, Dispatching; Eldridge Payne, Area Five Maintenance; Clarence D. Wells, Beta Two Shop; Mattie R. Marlar, Production Assay; and Arthur R. Melton, Building, Grounds and Maintenance Shops.

LOST-TIME INJURIES

Last week's electrical explosion in the Maintenance Division, which injured four employees, has resulted in lost-time injuries to the plant.

The previous charged accident resulted from infections caused by a fall on July 13.

SAFETY SCOREBOARD

The Y-12 Plant Has Operated

Three Days Or 62,000 Man-Hours

(Unofficial Estimate)

Through September 19
Without A Disabling Injury
SAFETY AT HOME,
AT WORK, AT PLAY

J. W. Gibson's Funeral Held in Cleveland, Tenn.

James W. Gibson, an instrument mechanic in Research Services, died August 29, at his Route 2, Clinton, home.

Mr. Gibson, a native of McMinn County, came here September 20,



J. W. Gibson

1948, after working with the Cooper Book Store, Cleveland, Tenn. He was an Army veteran, serving from 1942 until 1945.

Survivors include brothers Theodore and Kermit Gibson, both of Cleveland; and John Gibson, Charleston, Tenn.; and sisters, Katherine Stafford and Betty Baker, Cleveland.

Funeral services were held in Wildwood Chapel, Cleveland, and burial was in the Fort Hill Cemetery.

J. D. Mathes, Fireman, Has Fatal Heart Attack

Jasper D. Mathes, Y-12's Fire Department, died September 13, at his Oak Ridge home from an apparent heart attack.

Mr. Mathes, a native of Knoxville, came to Y-12 in 1954, transferring from Oak Ridge National Laboratory. He hired in on February 4, 1952.

He was in the U. S. Army briefly in 1944, and worked with Kerns Bakery and the Oak Ridge Fire Department before coming here. In the 30's he worked with Jefferson Woolen Mills, Knoxville.



J. D. Mathes

Survivors include his wife Mrs. Bessie Vann Mathes, 100 Jarrett Lane, daughters Mrs. Billy Flick, Mrs. Kenneth Justice, Mrs. Joby Parker, sons David and Ronnie, all of Oak Ridge; three brothers, Gene and Lee Mathes, Knoxville, and Harvey Mathes, Cleveland, Ohio.

Funeral services were held at Martin Funeral Home with Rev. Buford Nevins officiating. Burial was in Oak Ridge Memorial Park.



Y-12 CONTRIBUTIONS—Y-12 sons on the mighty Wildcat squad for 1971-72 are, first row, from left, Larry Baker, Joe Harris, Charlie Green, Jimmy Holbert, Jeff Creech, James Noey, Tom Holbert, David Oliphant and David Moore. In the back row are David Vest, Robert Morrow, Clinton Ball, Gordon Brewer, Roger Butturini, Roger Higginbotham, George Marrow, Tim Friar, Jeff Friar, Herbert Reynolds and Morgan Hess.

50th Anniversary

DISCOVERY OF INSULIN

By T. A. LINCOLN, M.D.

On the fiftieth anniversary of the discovery of insulin by Frederick Banting and Charles Best, it is exciting to review the remarkable speed with which this discovery was converted to a lifesaving treatment and the "breaks" which led Banting to a quick Nobel prize.

In July, 1920, Banting began a private practice of orthopedic surgery in London, Ontario. He had been thoroughly trained and had been a medical "hero" during World War I. Nevertheless, he had to wait 28 days for his first patient. To help make ends meet, he obtained a job as an assistant in the Physiology Department at Western University in London.

Had Banting's start in private practice been more successful, he might never have turned to the academic atmosphere and research.

During the evening of October 30, Banting read an article on pancreatic stones in one of his medical journals. The author, Moses Barron, described the degenerative changes in the pancreas when the main duct had been tied off artificially or blocked by gallstones. Barron had noticed that the islet cells of Langerhans, which were thought to

secrete a hormone called insulin, did not degenerate. One of the reasons why no one had been successful in extracting insulin from a surgically removed pancreas was the destructive action of the pancreatic digestive juice.

According to Banting's own account he couldn't sleep. He got up at 2:00 a.m. and wrote in his notebook, "Ligate pancreatic ducts of dogs. Wait six to eight weeks for degeneration. Remove the residue and extract."

A Toss of a Coin!

The next morning he started looking for support for his idea. Luckily he was referred to J.J.R. Macleod, Professor of Physiology at the University of Toronto. Even though Banting had had little or no experience in independent research, Macleod gave him ten dogs, an assistant for eight weeks and facilities for doing blood and urine sugar determinations.

Two graduate students tossed a coin to see who would serve the first four weeks. Charles Best won! The other student, a Mr. Noble, did not return for his four weeks so Best got to stay with the experiments. Thus, almost by luck, a remarkable association was started.

Banting and Best went to work immediately. Although Banting was a skilled surgeon, he had difficulty keeping the pancreatic duct tied off. All the dogs had to be reoperated before the technique was perfected. Best was primarily responsible for the biochemical aspects of the experiment.

On July 27, 1921, a degenerated pancreas was removed and cut into small pieces and frozen in brine. It was extracted with saline and the solution obtained was injected into a dog who had been made diabetic by the previous removal of his pancreas. The blood sugar came down within two hours! A crude insulin extract had been separated for the first time.

Diabetic Dog Kept Alive

Later, Banting and Best developed a method for extracting insulin from the pancreas of the fetal calf and finally from adult beef and pork pancreases. They found that insulin could be extracted by using alcohol of less than 90 percent concentration and then removing it by vacuum distillation at low temperatures.

The first diabetic dog tested with these extracts was kept alive and healthy for 76 days with daily injections. The first human treated was Leonard Thompson, a 14-year-old boy, who received his first injection of crude material on January 11, 1922.

Banting presented his first report to the American Physiological Society during the Christmas holidays of 1921. Dr. G.H.A. Clowes, director of research of the Eli Lilly Company, was in the audience and offered to help get insulin into production. By the middle of November of 1922, a reasonably stable and relatively pure insulin was being produced. After that, production improved rapidly so it was generally available by mid-1923.



Dr. Lincoln



WINNING COLTS—In this corner are the big K-25 Colts, winner of the Y-12 and K-25 softball league recently. The Colts sported a 15-win, 1-loss record. They consist of, kneeling from left, Mike Mitchell, Tony Angelelli, manager; Sam Woodfin, Jim Shoemaker, Bob Seyfried and Jerry Howard, assistant manager. Standing are Jim Treadwell, Roy Nabors, Sam Duncan, Harold Conner, Jack Cornett, Ted Hatcher and Calvin Angel. Not pictured are Steve Cates, Don Tidwell, Billy Bryan and Ralph McMillan. The Colts beat ORNL's Computes in a play-off game, 26-7.

RESA Elects New Officers

The new president of the Oak Ridge Branch of Scientific Research Society of America (RESA) is Michael Wilkinson (Solid State Division). The society, which is allied with Sigma Xi, is dedicated to the encouragement of scientific research; unlike its ally, RESA's members come from research laboratories whether industrial or governmental.

The other newly elected officers are Carl McHargue (Metals and Ceramics Division), vice-president; Roy Thoma (Reactor Chemistry Division), secretary; and Lorne Newman (Isotopes Division), treasurer. The Admissions Committee has Paul Griffin (Physics Division), Robert Kernohan (Solid State Division), Ray Stoughton (Chemistry Division), Richard Martin (AEC), and Edward von Halle (ORGDP).

Banting and Macleod, the chairmen of the department, who didn't join the team until the fall of 1922, were awarded the Nobel prize in 1923. Best, the student, was not included, even though he and Banting were the only authors on the two earliest publications. (Graduate students are probably not surprised at this omission!) However, Banting did share his monetary portion equally with Best, who later became famous in his own right as a physiologist and author of one of the leading textbooks of physiology.

It took only 26 months for an idea to be converted to a lifesaving treatment. The administrative bureaucracies now present in most universities and the federal establishments would probably delay the development and application of a comparable discovery many additional months — maybe years.

A Roumanian physiologist, Paulesco, independently was doing much the same work as Banting and Best. Due to unfavorable circumstances, he was unable to test a purified extract on human patients. Today, he is virtually unknown.

Banting had a good idea, got excellent cooperation, found a perfect partner and thereby beat his competition by a few months. Patients, too, were lucky because a small drug firm was willing to devote all its energies to quickly make a stable effective product, and get it to practicing physicians.



SPORTS NOTES



BOWLING—Y-12

Three bowling leagues have opened play among Y-12ers, as the Classic League (rolling on Thursdays), the C League (in action on Mondays), and the Mixed League (playing on Wednesdays.)

* * *

Did you know Travis Craig got to be King-of-the-Hill? The top-20 bowlers in Oak Ridge recently competed in a tournament, taped for Channel 11. Y-12er Craig came out with a 574 series...

Travis Craig games of 203, 204 and 167. If that final game had only held up a little more!

* * *

BOWLING—ORNL

Two 12-team leagues have started... as the C League opened play September 8, and A League fired opening pins September 14.

The six-team E league opened fire with the Guttersnipes assuming an early lead.

The ORNL Ladie's League, with eight teams competing, opened play September 7.

* * *

ALL CARBIDE

UCC sponsors programs in skeet, trap, high-power rifle, smallbore rifle, and pistol shooting, as well as archery. Over 40 skeet and trap events are set in a year-round program. The schedules are available and would-be skeet and trappers need not have a gun. Pistol firings also take place in winter and summer leagues. Smallbore competition begins today, September 23.

K-25's Bill Davy capped July Skeet firings with a 48.893, Son Bill from ORNL came in second with 48.858, and Ken Bahler, of General Staff, fired a 48.575.

August's highs saw Bahler shoot a fine 49.243, and B. S. Denton, 48.887, and Charlie Asmanes a 48.845, all from Y-12.

GOLF—Y-12

Coffee-Davenport sewed up the Southwest Point Golf League, with Jones-Morgan trailing a close second. Bowers-Rowan clipped the Parker-Parrott combo for top spot in the South Hills Golf race. J Shift visitors proved to be E. V. Hawk and Charley Baxter, with Clabough and Thomas in second place.

The final tournament of the year (Cedar Hills) saw J. R. Baker card a 73... to win medalist honors at the Lenoir City course, with a one-over-par 73. Randy Collins took division two, with 83; Fred Hammond, division three, with 80; and Dave Smith and C. E. Spradlen tied for honors in division four with 94.

GOLF—ORGDP

Alvin Boatwright shot a 73 to win medalist honors in the final K-25 golf tournament of the current season. Dave Byrd took handicap honors in the first division with a net 76.

This tournament was held on the challenging Gatlinburg Golf and Country Club Course, September 11.

J. A. Duff had the best scratch score in the second division — an 89. G. B. Brooks, John Keller, and Bob McGrath shared handicap laurels with net 82's.

Third division medalist honors were shared by John Pashley and C. T. McLoughlin, both having 97's. McLoughlin's one stroke higher handicap gave him the edge for the net 79 score.

Hole-in-one winners:

DIVISION I

No. 8 Hole-In-One
Bill Davis 12 ft. 7 in.
Harris Creswell 12 ft. 10 in.

No. 12 Hole-In-One

Dick Magyar 8 ft. 10 in.
Ed Ellis 14 ft. 7 in.

DIVISION II

No. 8 Hole-In-One

Herb Trammell 19 ft. 5 in.
H. D. Culpepper 21 ft. 9 in.

No. 12 Hole-In-One

Bill Grumbach 14 ft. 9 in.
A. H. Marshall 18 ft.

DIVISION III

No. 8 Hole-In-One

Jim Qualls 8 ft. 1 in.
Ray Rinehart 5 ft.

No. 12 Hole-In-One

Jim Qualls 21 ft. 8 in.
Lyle Hensley 27 ft. 1 in.

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Toxicology Info Center

(Continued from Page 1)

life. Information pertaining to these grants is often incomplete and difficult to obtain and evaluate.

A machine readable data base for toxicology information is being compiled from the open literature, Government reports and various private collections. It will be continuously updated as information on new compounds is developed. The data base will include bibliographies, the results of laboratory tests, chemical structures, residues, short and long-term effects on man and his food chain, and sources, methods and quantities of application of compounds.

Although initially dealing mostly with environmental chemicals, the Center's program will be expanded to include information on various other aspects of toxicology, such as drug interactions and their adverse effects. Among the services offered by the Center are literature searches, specialized bibliographies, critical reviews, state-of-the-art reviews and selected dissemination of information to interested persons.

Funding for the Center is provided by the National Library of Medicine, a branch of the National Institutes of Health.

Bennett, UT Consultant Co-Author Denver Paper

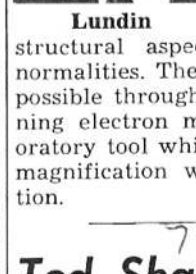
A Union Carbide chemist and a consultant from The University of Tennessee have co-authored a report to be presented at the International Metallographic Society in Denver, Colo., Sept. 21-23.



Bennett

The paper, authored by C. D. Lundin of The University of Tennessee and R. K. Bennett of the Oak Ridge Y-12 Plant, is entitled "Scanning Electron Microscopy of Fractures in Welded Structures." It describes developmental work performed at the Y-12 Plant in support of U. S. Atomic Energy Commission programs.

The report points out that although defects, discontinuities and fractures in welded structures are the concern of metallurgist and fabricator alike, only recently has it been possible to observe directly and interpret clearly the structural aspects of such abnormalities. The advance is made possible through use of the scanning electron microscope, a laboratory tool which combines high magnification with clear resolution.



Lundin

Ridge Playhouse Marking Open House on Sept. 26

The Oak Ridge Community Playhouse will hold open house Sunday, September 26, beginning at 8 p.m. Tours of the theater in Jackson Square, Oak Ridge, will feature displays in the lobby of the highlights of the Playhouse's history. Paul Ebert, director, will give a resume of Playhouse history at 8 p.m. entitled "28 Years of Blood, Sweat and Tears, and a Few Smiles." Past Playhouse presidents will also be featured. There will be general tryouts and time to sign up for work crews for anyone interested. Playhouse membership is not required.

The public is invited to Sunday's open house.

ORNL Retiree

Roy Sanford is retiring this month after 23 years as an ORNL staff member. He is a design supervisor in General Engineering Division.

After his retirement you can visit him at his home at 421 East Drive in Oak Ridge or at his place on Watts Bar Lake. He says he is going to do "whatever I feel like doing." One of those things is fishing. He plans to buy a fishing boat and spend a lot of time with the rod and reel. Also he is a TV fan and watches all kinds of sports programs.

Address Correct?

With every issue of the Nuclear Division News, the mail rooms receive copies back from defunct addresses.

If you have moved, or are planning to move, pick up a change of address form, UCN-4488, from your division or department office. It must be filled out before a new address plate can be made for you. Just drop it in the company mails, and your address will be changed. Folks in the mail rooms in all four plants will appreciate it.



Harold J. Mayberry

Veteran K-25 Editor Retiring October 1

They came to Oak Ridge in the spring of '44, planning to move on after the war, and they're still there. Harold and Carol Mayberry are permanent fixtures around the Atomic City. Active in Recording for the Blind, the Oak Ridge Playhouse, and many other civic activities, the couple is planning a pilgrimage back to Kansas, a European jaunt next summer, and several other things to keep busy.

Mayberry, in Industrial Relations at Oak Ridge Gaseous Diffusion Plant, has worn many hats at ORGDP since hiring in there May 1, 1944. He edited the Carbide Courier the last 10 years of its existence, and for the past year and a half has been editor of the ORGDP section of the Nuclear Division News. He has coordinated Christmas parties, bowling leagues, softball leagues, golf tournaments, and been the "major-domo" of the Hootenanny-Barbeque affair the plant holds every year. He has been in training, employment, and other functions of Industrial Relations.

The Mayberrys live at 34 Outer Drive. Mrs. Mayberry is the former Carol Briscoe, Winfield, Kan.

Mayberry was born in Wichita, and holds an AB in education from Friends University, Wichita. He worked with the Jayhawk Ordnance Works, Pittsburgh, Kan., before coming here.

The couple has two children, Tom, a teacher and assistant football coach at Clinton High School; and Judith Ann Burke, with her husband in the Air Force in The Netherlands, with their 10-month-old son.

The amiable Mayberry plans to work in some more golf, earn some more master points in competitive bridge, and just take it easy.

Like the man who came to dinner, the Mayberrys just stayed on. We're glad they did.

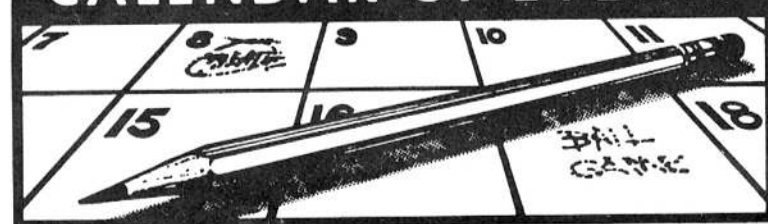
Analytical Chemistry Sets Annual Meeting Oct. 12

The fifteenth conference on Analytical Chemistry in Nuclear Technology will be held in the Oak Ridge Playhouse, Jackson Square, Oak Ridge, beginning October 12. All papers and discussions are unclassified and sessions are open to any interested person who is registered.

Registration will be in the Playhouse lobby, or preregistration through L. J. Brady, ORNL. Sessions begin at 9 a.m. Tuesday, October 12, and extend through 3:10 p.m. October 14.

Many Nuclear Division scientists and engineers are scheduled to deliver papers during the three-day conference. ORNL is sponsoring the conference.

CALENDAR OF EVENTS



TECHNICAL September 30

East Tennessee Chapter of the Health Physics Society — Samuel Glasstone, speaker: Oak Ridge Country Club, social hour beginning at 5:30 p.m.

October 5-8

International Symposium on Preparation of Special Research Materials for Nuclear Measurements: Riverside Motor Lodge, Gatlinburg.

October 6

Chemistry Division Information Meeting: Central Auditorium, 9 a.m.

October 7

Chemistry Division Information Meeting: Central Auditorium, 9 a.m.

October 12-14

Analytical Chemistry Conference in Nuclear Technology: Oak Ridge Playhouse.

October 13-14

MSR-GCR Semi-Annual Information Meeting: Oak Ridge National Laboratory.

COMMUNITY ARTS FESTIVAL EVENTS September 24

Classical guitar concert by Jesus Silva, resident professor of classical guitar at North Carolina

School of The Arts. Oak Ridge Playhouse, 8:15 p.m. Admission: \$3.

September 25

The Memphis Opera Theatre presents "The Barber of Seville." Oak Ridge High School Auditorium, 8:15 p.m. Admission: \$3; student \$1.

September 26

Piano recital by the Junior Music Club. Oak Ridge Civic Center, Meeting Rooms A and B, 4 p.m.

Display of Tibetan Saddle Carpets. Oak Ridge Community Art Center, gallery hours 3-6 p.m. Film with commentary describing the exhibit by the Smithsonian Institution shown at 3 p.m. and at 5 p.m.

AIR TRAVEL

Schedule delays and banged-up baggage handling are the two most common complaints of business travelers. So says a survey which recently polled a top-notch group who logged a total nine million miles by air last year. (8.5 percent traveled a minimum 100,000 miles.) Of those surveyed, 9.5 percent fly to save time; 43 percent fly for convenience. Five percent fly because they like to.

NUCLEAR DIVISION NEWS



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JAMES A. YOUNG, Editor EXT. 3-7100
MARTHA GOOLSBY, Assoc. Editor EXT. 3-6421

— Member —

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